

# Memorandum

*Flex your power!  
Be energy efficient!*

**To:** DEPUTY DISTRICT DIRECTORS, Construction  
DEPUTY DIVISION CHIEFS, Structure Construction  
CONSTRUCTION MANAGERS  
SENIOR CONSTRUCTION ENGINEERS  
RESIDENT ENGINEERS

**Date:** December 1, 2005

**File:** Division of Construction  
CPD 05-11

**From:** ROBERT PIEPLOW  
Chief  
Division of Construction



**Subject:** Alternative Terminal Systems for Safety Devices

Metal beam railing terminal systems types Slotted Rail Terminal (SRT) and End Terminal (ET) are no longer approved as sole source items. Similar and competing products are now available for use. The Department in concert with the Federal Highway Administration developed an "Alternative Terminal System" bid item to allow competition for terminal systems on future projects.

For projects currently under construction, contractors may request to use an alternative terminal system via a cost reduction incentive or a no-cost change order if the contract does not have an alternative terminal system bid item. There is not an approved alternative terminal system for terminal systems type Crash Attenuating Terminal (CAT). Only consider requests to use alternative terminal systems if there is a net cost savings or no additional costs to the project. Cost reduction incentive proposals must be in accordance with Sections 5-1.019, "Cost Reduction Incentive," of the special provisions and Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*.

Flared Energy Absorbing Terminal (FLEAT) is an acceptable terminal system type alternative to terminal system type SRT. Sequential Kinking Terminal (SKT) is an acceptable terminal system type alternative to terminal system type ET.

For contracts supplemented with the *1999 Standards Plans*, include the following in the contract change order as needed:

- Special provision for the terminal system type FLEAT or the special provision for the terminal system type SKT.

- 1999 Standard Plan NSP A77S for system type FLEAT or 1999 New Standard Plan NSP A77R type SKT for in-line systems. These plans are accessible at:

[http://www.dot.ca.gov/hq/esc/oe/project\\_plans/HTM/1999-updates.htm](http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/1999-updates.htm)

For contracts supplemented with the *2004 Standards Plans*, include the following into the contract change order as needed:

- Special provision for the terminal system type FLEAT or the special provision for the terminal system type SKT.
- The appropriate reference to 2004 Standard Plan A77L5 for the terminal system type FLEAT or 2004 Standard Plan A77L2 for terminal system type SKT.

The resident engineer must receive concurrence from the project engineer before approval of a change order to incorporate alternative terminal systems. Concurrence from the Division of Construction is not required to process change orders regarding alternative terminal systems.

If you have any questions or comments regarding this construction procedure directive, contact Greg Berry, Division of Construction's Safety Coordinator at (916) 654-4580.

Attachments:      Special Provision Terminal System (Type SKT)  
                            Special Provision Terminal System (Type FLEAT)